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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,678

12/27/2005

Adolf Bernds

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EXAMINER

SARKAR, ASOK K

ART UNIT

PAPER NUMBER

2891

MAIL DATE

DELIVERY MODE

05/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/542,678	Applicant(s) BERNDS ET AL.	
	Examiner Asok K. Sarkar	Art Unit 2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9,10/05:5/06:6/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: A period should be placed at the end of the claim limitations. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2 and 4 – 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kubota, US 2002/0113241.

Regarding claim 1, Kubota teaches a process for the production of an organic electronic component comprising a plurality of organic based functional layers (organic EL device, paragraph 3), wherein at least one of the functional organic based layers is applied in a continuous process step in the form of a homogenous, unpatterned coating obtained by a roll – to – roll compatible process (paragraphs 42, 50, 68, 141, 145 and 149) selected from the group consisting of one of porous roll coating, dip coating, rod coating, knife coating, blade coating, air knife coating, gravure coating, forward and

reverse coating, slot and extrusion coating, slide coating, curtain coating, and spray coating (paragraph 149).

Regarding claim 2, Kubota teaches a process for applying a homogenous and unpatterned coating of an organic electronic component, which is carried out in a wholly roll – to – roll process on, for example, a web or individual sheets in paragraphs 141.

Regarding claim 4, Kubota teaches layers are directly or indirectly patterned in a subsequent process step in paragraphs 105 and 112.

Regarding claim 5, Kubota teaches a process for the continuous production of an organic component, comprising the following production steps:

- applying to a substrate which is consisting of a continuous, coherent web or sheet feed comprising a succession of individual sheets, by a continuous coating method, a functional organic material layer, which is one of conducting, semi – conducting or insulating material, as a homogenous, unpatterned coating in paragraphs 40, 42, 68, 141, 145 and 149;
- printing a varnish in patterned form over the functional layer in paragraphs 105, 145 (photolithography inherently means forming a varnish layer); and
- patterning the functional layer by means of the varnish directly or via further process steps in paragraphs 105 and 112.

Regarding claim 6, Kubota teaches at least one pretreatment step is carried out prior to the coating or printing process in paragraph 43 by forming a gas barrier layer.

Regarding claim 7, Kubota teaches the respective coating and/or patterning step is followed by after treatment of the layer in paragraph 149.

Regarding claim 8, Kubota teaches patterning of the layers is carried out in a roll – to – roll compatible process and including any one selected from the group consisting of for example by gravure printing, planographic printing (offset), letterpress printing (flexographic printing), ink jet printing, laser printing, or by combinations thereof and related processes in paragraphs 145 and 149.

Regarding claim 9, Kubota teaches an electronic component, constructed by one or more of the processes as defined in any one of claims in paragraph 3. This is a product by process claim.

Note that a “product by process” claim is directed to the product per se, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessmann*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); *In re Marosi et al*, 218 USPQ 289; and particularly *In re Thorpe*, 227 USPQ 964, all of which make it clear that it is the patentability of the final product per se which must be determined in a “product by process” claim, and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in “product by process” claims or not. Note that applicant has the burden of proof in such cases, as the above case laws make clear.

4. Claims 1, 2, 4 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Foust, US 2004/0121508.

All limitations of these claims are taught by Foust in the abstract and paragraphs 1 and 16 – 35 with references to Figs 1 – 9.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 5 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foust, US 2004/0121508.

Regarding claim 5, Foust teaches all elements of the claim, and teaches patterning by conventional means in paragraphs 25 and 30, but fails to teach printing a varnish in patterned form over the functional layer; and patterning the functional layer by means of the varnish directly or via further process steps.

However, it would have been obvious to one with ordinary skill in the art at the time of the invention that one of conventional means of patterning is by photolithography in which a photoresist (varnish) layer is patterned and the underlying layers are patterned by etching through the resist mask layer.

Regarding claims 6 and 7, Foust teaches pretreatment step in paragraph 19 and an after treatment such as heating and drying after the printing treatment in paragraph 33.

Regarding claim 8, Foust teaches patterning of the layers is carried out in a roll – to – roll compatible process and including any one selected from the group consisting of for example by gravure printing in paragraph 32.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asok K. Sarkar whose telephone number is 571 272 1970. The examiner can normally be reached on Monday - Friday (8 AM- 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William B. Baumeister can be reached on 571 272 1722. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Asok K. Sarkar/
Primary Examiner, Art Unit 2891

May 8, 2008